#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property **Organization**

International Bureau



### 

(43) International Publication Date 12 February 2004 (12.02.2004)

# (10) International Publication Number

(51) International Patent Classification<sup>7</sup>:

WO 2004/013208 A1

(21) International Application Number:

PCT/KR2003/000414

C08J 3/075

(22) International Filing Date:

4 March 2003 (04.03.2003)

(25) Filing Language:

Korean

(26) Publication Language:

10-2002-0045542

English

(30) Priority Data:

1 August 2002 (01.08.2002)

(71) Applicant and

(72) Inventor: KIM, Hongdoo [KR/KR]; Jugong Apt. 150-402, #955-1, Youngtong-dong, Paldal-gu, Suwon-si, Kyungki-do 442-470 (KR).

(74) Agents: JANG, Seongku et al.; 19th Fl., KEC Building, #275-7, Yangjae-dong, Seocho-ku, Seoul 137-130 (KR).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

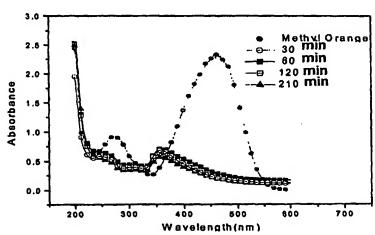
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Published:**

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A SURFACTANT-LIKE POLYMER GEL AND A METHOD FOR SEPARATING MATERIAL USING SAME



(57) Abstract: The present invention relates to a polymer gel having a surfactant-like micelle structure obtained by polymerization or condensation polymerization of an ionic surfactant and an organic or inorganic compound having polymerizable moiety, which is capable of adsorbing and separating specific compounds in an easy recyclable manner.

WO 2004/013208 A1 BEST AVAILABLE COPY